APPROVED BY DRAFTSMAN | O.G. FIG. CLASS | SUBCLASS

Plasmid pCMV .Bx08.gp160

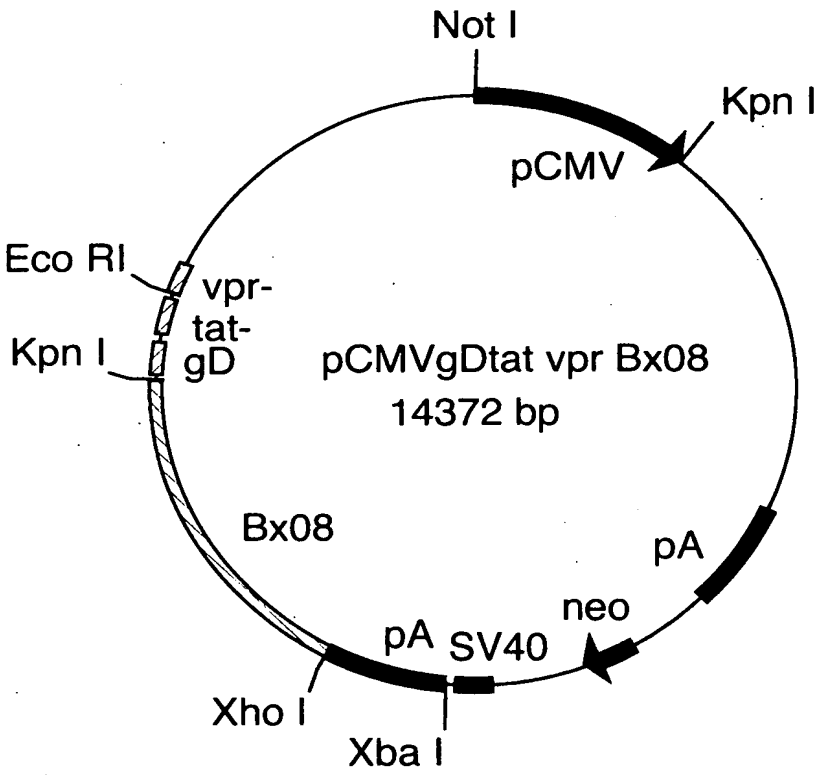

FIG.1

APPROVED BY DRAFTSMAN | O G. FIG. | CLASS | SUBCLASS

DNA immunization plasmid pCMV3Bx08.

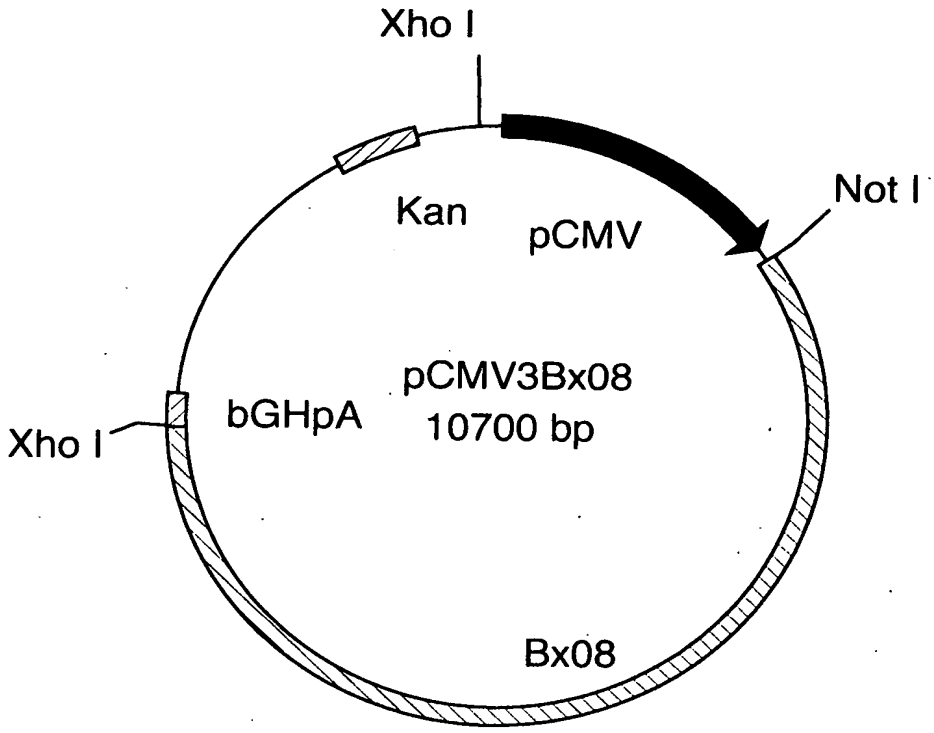

FIG.2

APPROVED BY DRAFTSMAN | O.G. FIG. CLASS | SUBCLASS

Pseudovirion Expression Plasmid p133B1 HIV-1 Bx08

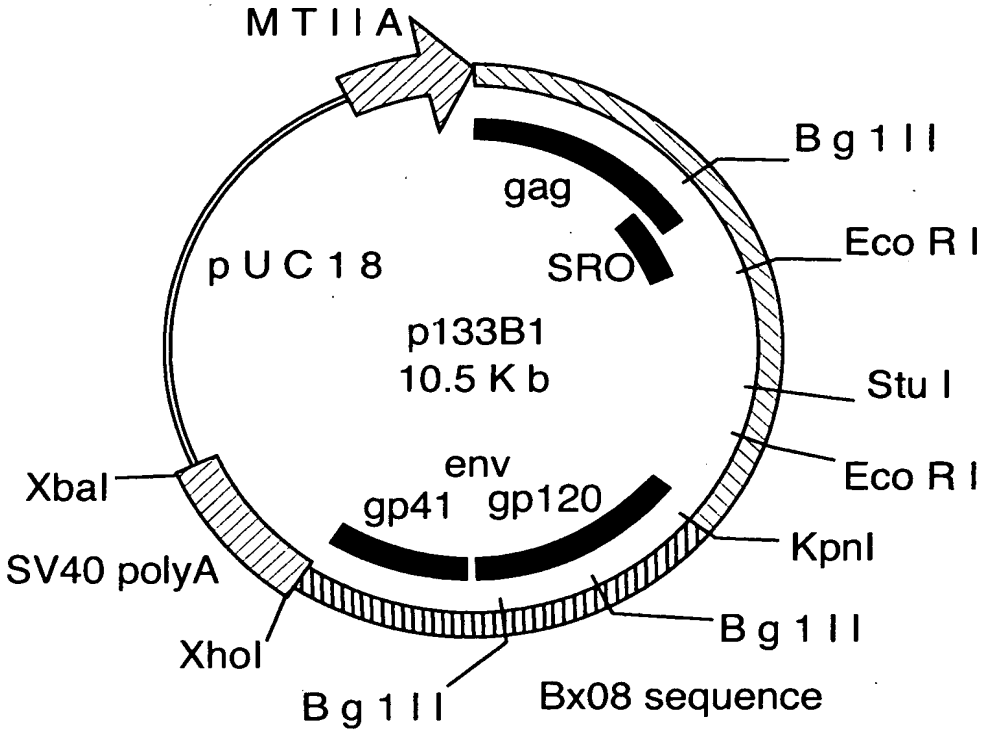

FIG.3

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O.G. FIG.
CLASS SUBCLASS

ALVAC(2)120(BX08)GNP
(vCP1579)
(ALVAC XhoI Restriction Map)

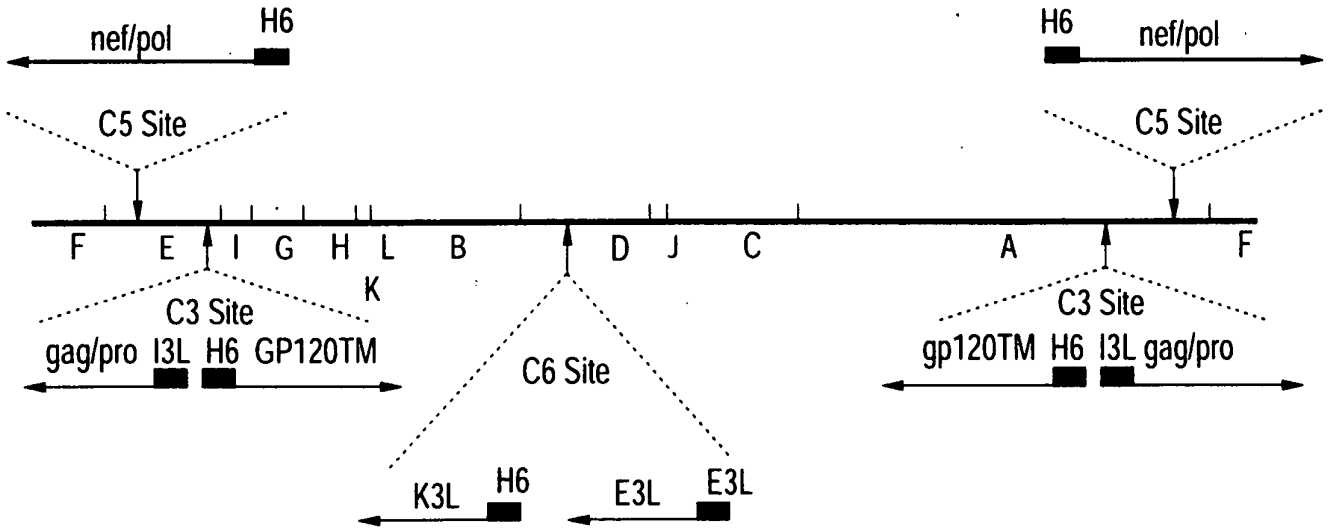

FIG.4

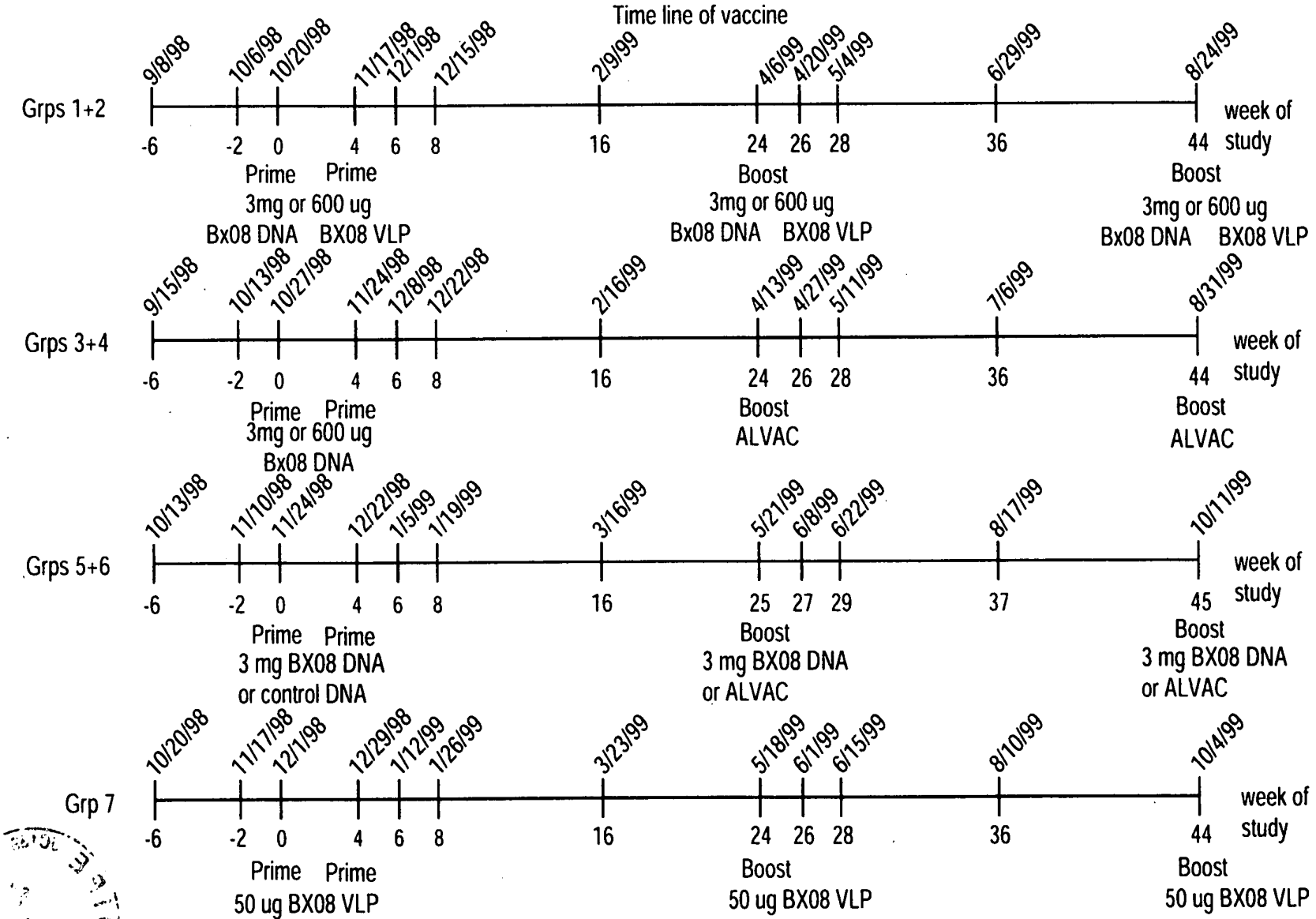

FIG.5A

APPROVED BY DRAFTSMAN
O.G. FIG. CLASS SUBCLASS

APPROVED BY DRAFTSMAN | O.G. FIG. CLASS | SUBCLASS

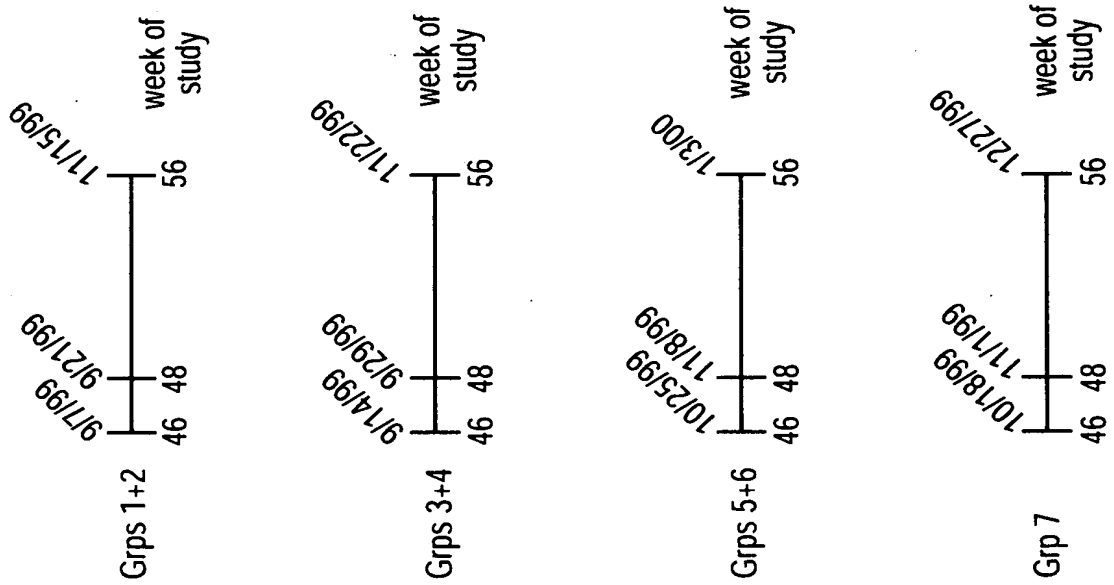

FIG.5B

APPROVED BY DRAFTSMAN | O G. FIG. | CLASS | SUBCLASS

26 wk macaque serum immunoreactivity to HIV antigens (1:100 diln)

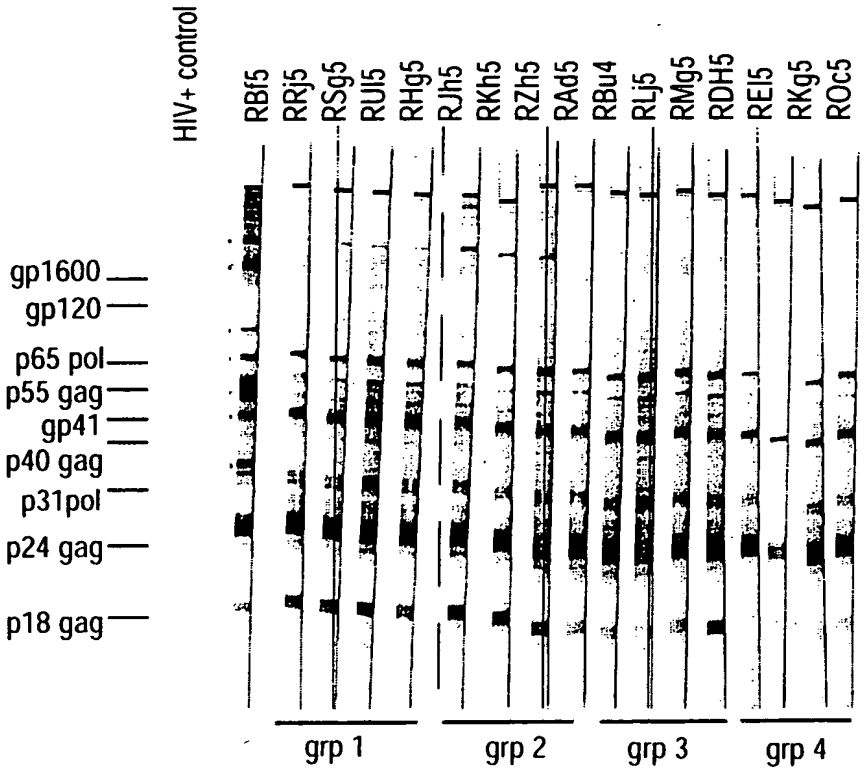

FIG.6A

APPROVED BY DRAFTSMAN | O G. FIG. | CLASS | SUBCLASS

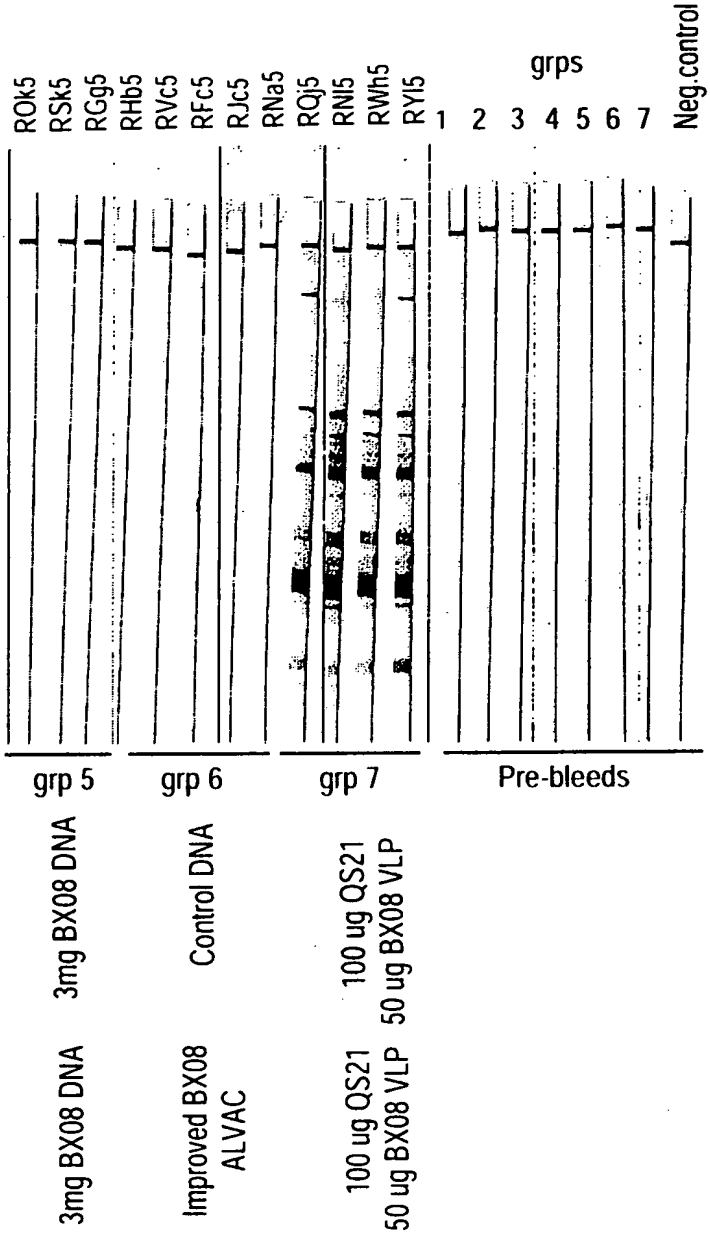

FIG.6B

APPROVED BY DRAFTSMAN | O.G. FIG. CLASS | SUBCLASS

26 wk macaque serum immunoreactivity to HIV antigens (1:1000 diln)

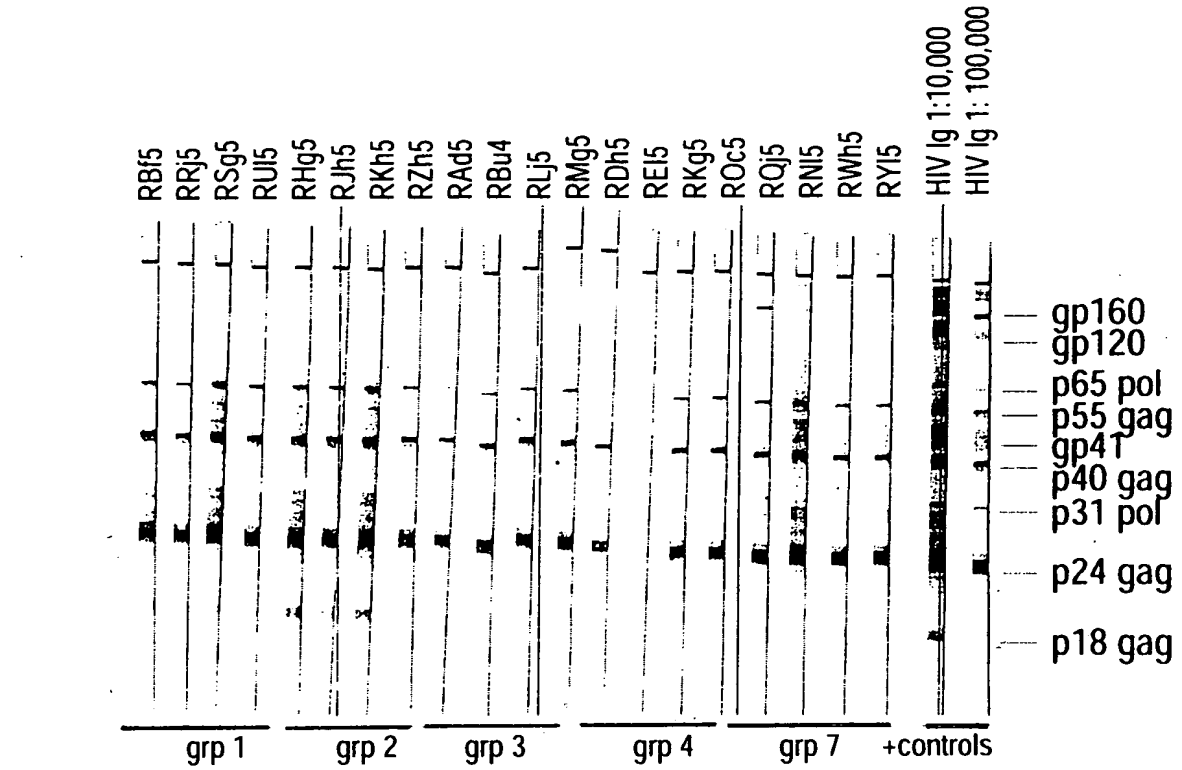

FIG.7

APPROVED BY DRAFTSMAN | O G. FIG. | CLASS | SUBCLASS

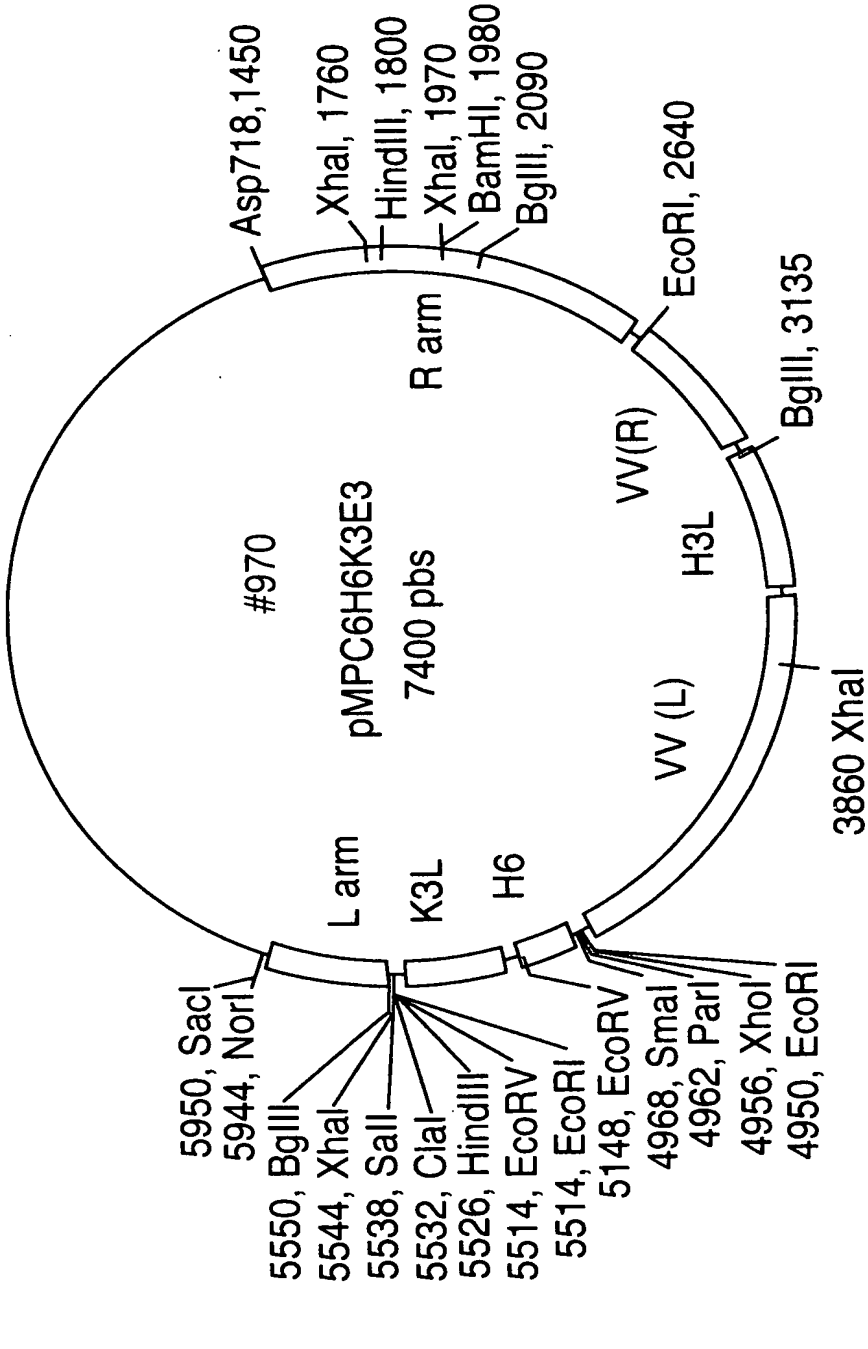

FIG.8

APPROVED BY DRAFTSMAN | O.G. FIG. CLASS | SUBCLASS

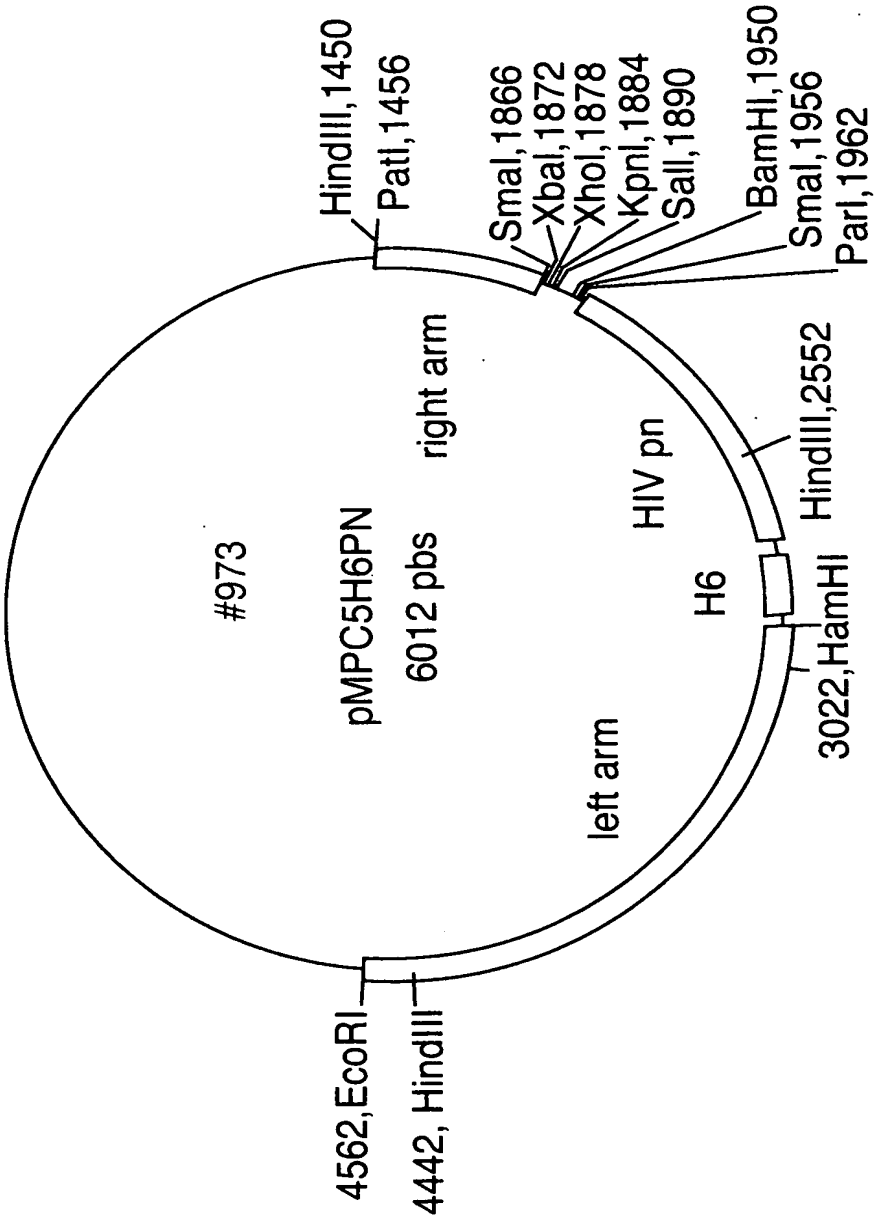

FIG.9

APPROVED BY DRAFTSMAN | O.G. FIG. | CLASS | SUBCLASS

Plasmid pHIV76

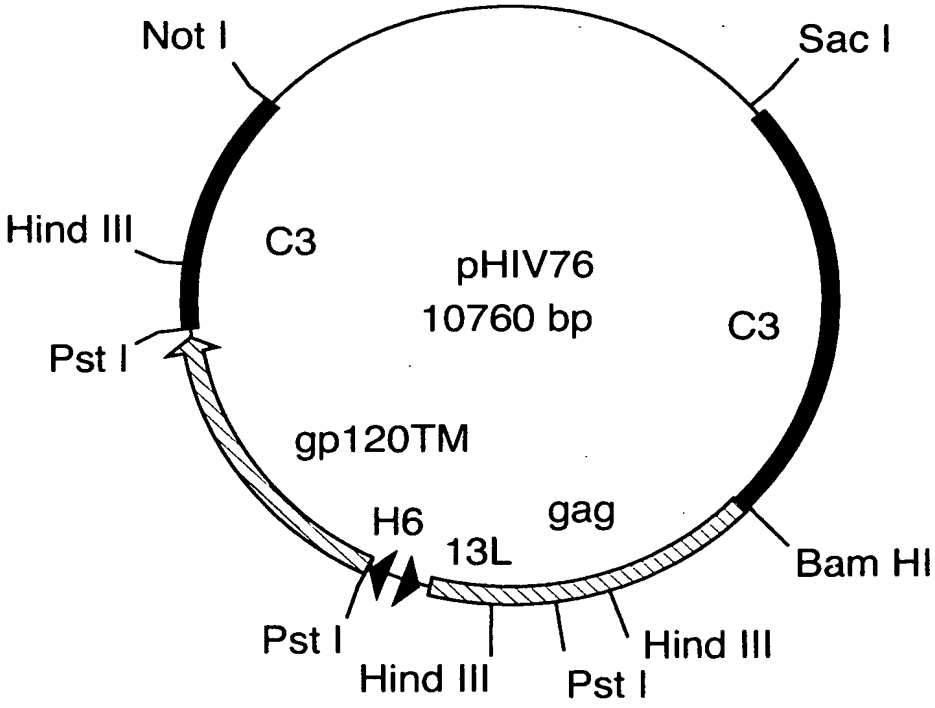

FIG.10

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O.G. FIG.
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FIG.11A

vCP1579: H6/HIV Pol/Nef epitope cassette in ALVAC C5 site

```
   1 TTTTTTTCAT TATTTAGAAA TTATGCATTT TAGATCTTTA TAAGCGGCCG TGATTAACTA
  61 GTCATAAAAA CCCGGGATCG ATTCTAGACT CGAGGGTACC GGATCTTAAT TAATTAGTCA
 121 TCAGGCAGGG CGAGAACGAG ACTATCTGCT CGTTAATTAA TTAGGTCGAC GGATCCCCCA
 181 ACAAAAACTA ATCAGCTATC GGGGTTAATT AATTAGTTAT TAGACAAGGT GAAAACGAAA
 241 CTATTTGTAG CTTAATTAAT TAGAGCTTCT TTATTCTATA CTTAAAAAGT GAAAATAAAT
 301 ACAAAGGTTC TTGAGGGTTG TGTTAAATTG AAAGCGAGAA ATAATCATAA ATTATTTCAT
 361 TATCGCGATA TCCGTTAAGT TTGTATCGTA ATGCCACTAA CAGAAGAAGC AGAGCTAGAA
 421 CTGGCAGAAA ACAGAGAGAT TCTAAAAGAA CCAGTACATG GAGTGTATTA TGACCCATCA
 481 AAAGACTTAA TAGCAGAAAT ACAGAAGCAG GGGCAAGGCC AATGGACATA TCAAATTTAT
 541 CAAGAGCCAT TTAAAAATCT GAAAACAGGA ATGGAGTGGA GATTTGATTC TAGATTAGCA
 601 TTTCATCACG TAGCTAGAGA ATTACATCCT GAATATTTTA AAAATTGTAT GGCAATATTC
 661 CAAAGTAGCA TGACAAAAAT CTTAGAGCCT TTTAGAAAAC AAAATCCAGA CATAGTTATC
 721 TATCAATACA TGGATGATTT GTATGTAGGA TCTGACTTAG AAATAGGGCA GCATAGAACA
 781 AAAATAGAGG AGCTGAGACA ACATCTGTTG AGGTGGGGAC TTACAACCAT GGTAGGTTTT
 841 CCAGTAACAC CTCAAGTACC TTTAAGACCA ATGACTTACA AAGCAGCTGT AGATCTTTCT
 901 CACTTTTTAA AAGAAAAAGG AGGTTTAGAA GGGCTAATTC ATTCTCAACG AAGACAAGAT
 961 ATTCTTGATT TGTGGATTTA TCATACACAA GGATATTTTC CTGATTGGCA GAATTACACA
1021 CCAGGACCAG GAGTCAGATA CCCATTAACC TTTGGTTGGT GCTACAAGCT AGTACCAATG
1081 ATTGAGACTG TACCAGTAAA ATTAAAGCCA GGAATGGATG GCCCAAAAGT TAAACAATGG
1141 CCATTGACAG AAGAAAAAAT AAAAGCATTA GTAGAAATTT GTACAGAGAT GGAAAAGGAA
1201 GGGAAAATTT CAAAAATTGG GCCTTAATTT TTCTGCAGCC CGGGGGATCC TTTTTATAGC
```

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O. G. FIG.
CLASS SUBCLASS

FIG.11B

1261 TAATTAGTCA CGTACCTTTG AGAGTACCAC TTCAGCTACC TCTTTTGTGT CTCAGAGTAA
1321 CTTTCTTTAA TCAATTCCAA AACAG

Upstream (right) flanking sequence: 1-266
VV H6 promoter: 267-390
HIV pol/nef/pol/nef/pol cassette: 391-1227
Downstream (left) flanking sequence: 1227-1345

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O. G. FIG.
CLASS
SUBCLASS

FIG.12A

E3L and K3L genes in C6

```
       10         20         30         40         50...
    *    *     *    *     *    *     *    *     *    *...
GAGCTCGCGG CCGCCTATCA AAAGICTTAA TGAGTTAGGT GTAGATAGTA...
CTCGAGCGCC GGCGGATAGT TTTCAGAATT ACTCAATCCA CATCTATCAT...
                     ...         60         70         80         90         100        110
                     ...     *    *     *    *     *    *     *    *     *    *     *    *
                     ... TAGATATTAC TACAAAGGTA TTCATATTTC CTATCAATTC TAAAGTAGAT GATATTAATA
                     ... ATCTATAATG ATGTTTCCAT AAGTATAAAG GATAGTTAAG ATTTCATCTA CTATAATTAT

      120        130        140        150        160...
    *    *     *    *     *    *     *    *     *    *...
ACTCAAAGAT GATGATAGTA GATAATAGAT ACGCTCATAT AATGACTGCA...
TGAGTTTCTA CTACTATCAT CTATTATCTA TGCGAGTATA TTACTGACGT...
                     ...        170        180        190        200        210        220
                     ...     *    *     *    *     *    *     *    *     *    *     *    *
                     ... AATTTGGACG GTTCACATTT TAATCATCAC GCGTTCATAA GTTTCAACTG CATAGATCAA
                     ... TTAAACCTGC CAAGTGTAAA ATTAGTAGTG CGCAAGTATT CAAAGTTGAC GTATCTAGTT
```

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O.G. FIG.
CLASS SUBCLASS

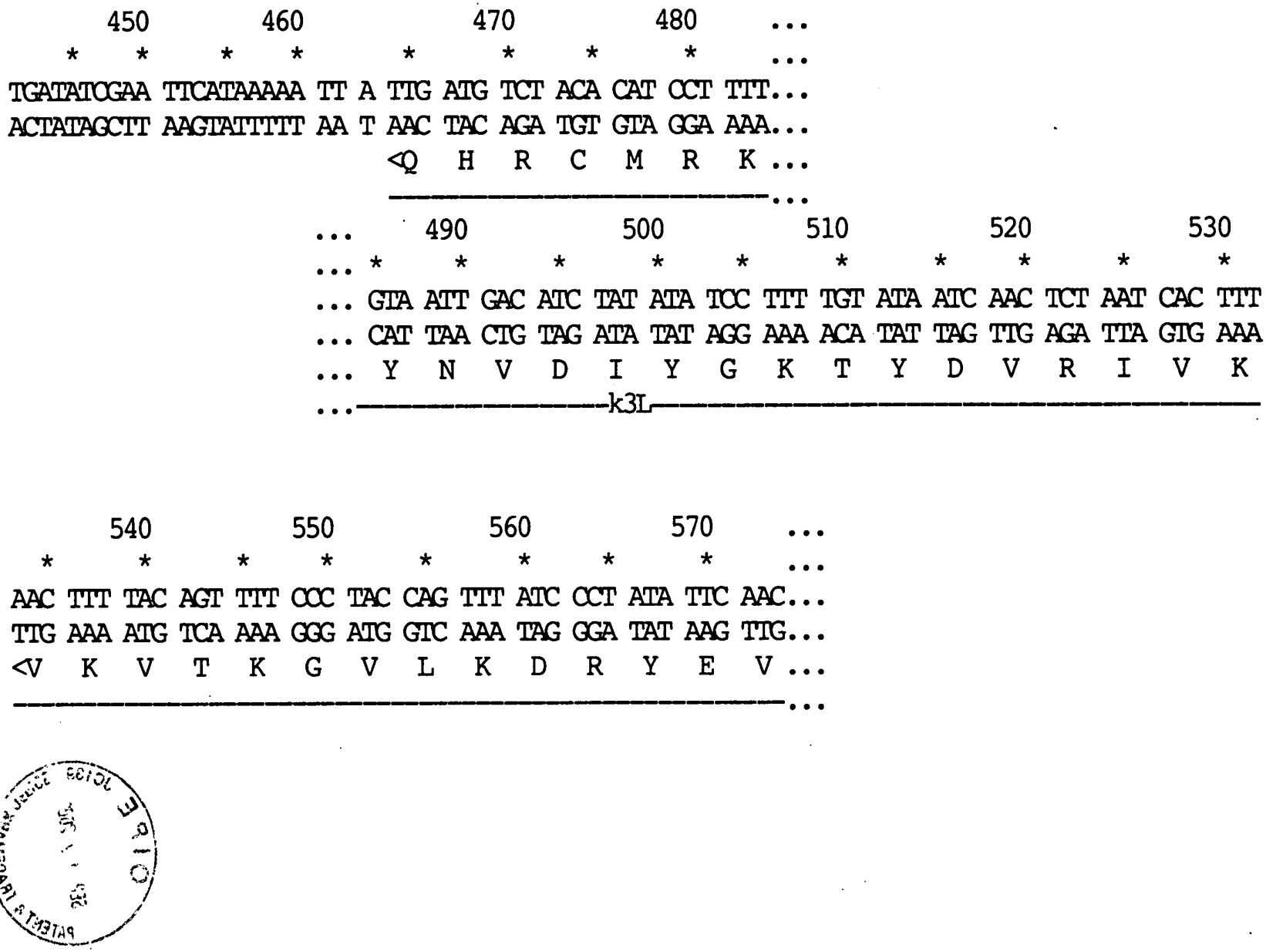
FIG.12B

```
      230        240        250        260        270...
    *    *     *    *     *    *     *    *     *    *...
AATCTCACTA AAAAGATAGC CGATGTATTT GAGAGAGATT GGACATCTAA...
TTAGAGTGAT TTTTCTATCG GCTACATAAA CTCTCTCTAA CCTGTAGATT...

                      ...        280        290        300        310        320        33
                      ...     *    *     *    *     *    *     *    *     *    *     *    *
                      ... CTACGCTAAA GAAATTACAG TTATAAATAA TACATAATGG ATTTTGTTAT CATCAGTTAT
                      ... GATGCGATTT CTTTAATGTC AATATTTATT ATGTATTACC TAAAACAATA GTAGTCAATA

      340        350        360        370        380...
    *    *     *    *     *    *     *    *     *    *...
ATTTAACATA AGTACAATAA AAAGTATTAA ATAAAAATAC TTACTTACGA...
TAAATTGTAT TCATGTTATT TTTCATAATT TATTTTTATG AATGAATGCT...
                      ...        390        400        410        420        430        440
                      ...     *    *     *    *     *    *     *    *     *    *     *    *
                      ... AAAAATGACT AATTAGCTAT AAAAACCCAG ATCTCTCGAG GTCGACGGTA TCGATAAGCT
                      ... TTTTTACTGA TTAATCGATA TTTTTGGGTC TAGAGAGCTC CAGCTGCCAT AGCTATTCGA
```

FIG.12C



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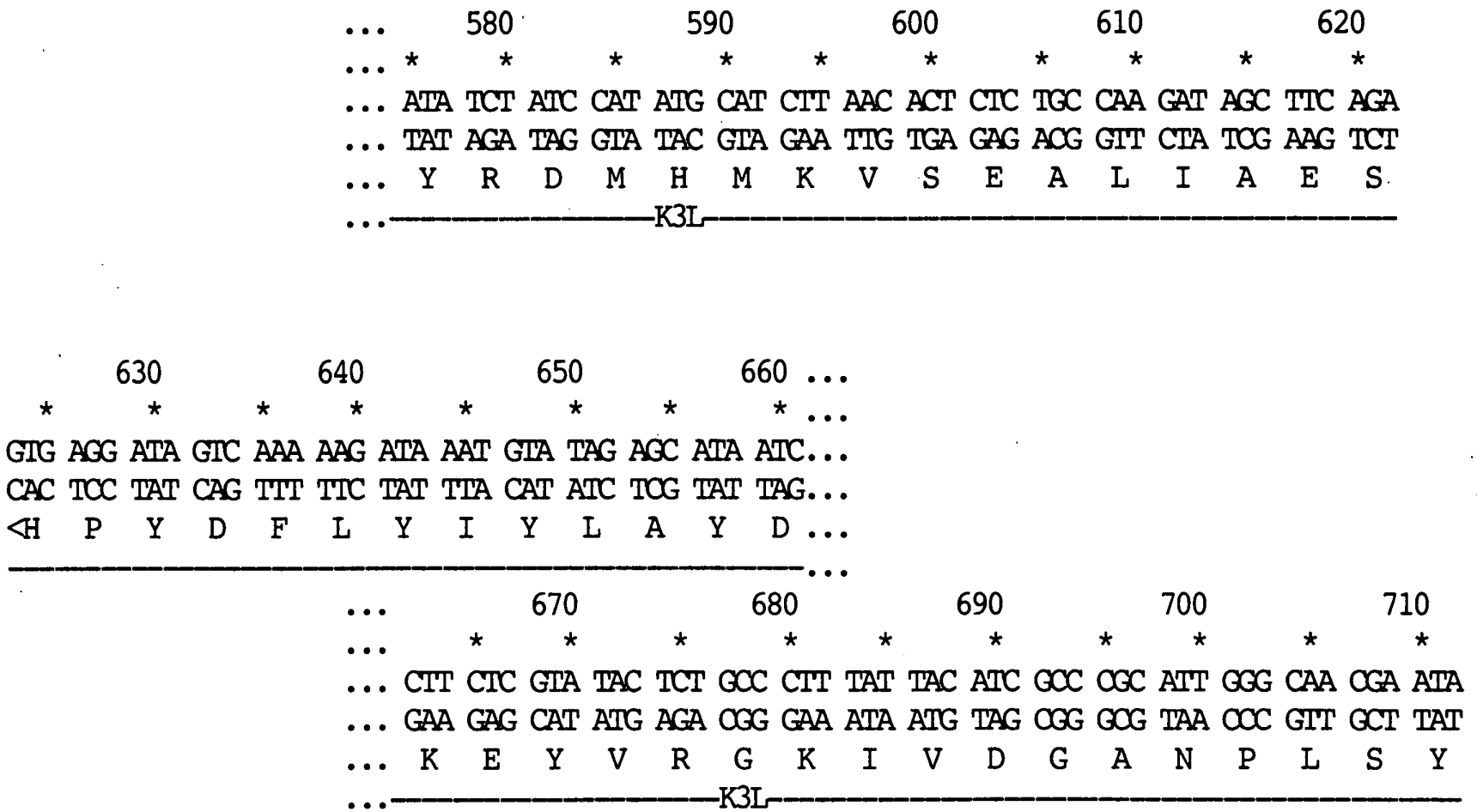
O.G. FIG. CLASS SUBCLASS

FIG.12D



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O.G. FIG.
CLASS SUBCLASS

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O.G. FIG.
CLASS SUBCLASS
DRAFTSMAN

FIG.12E

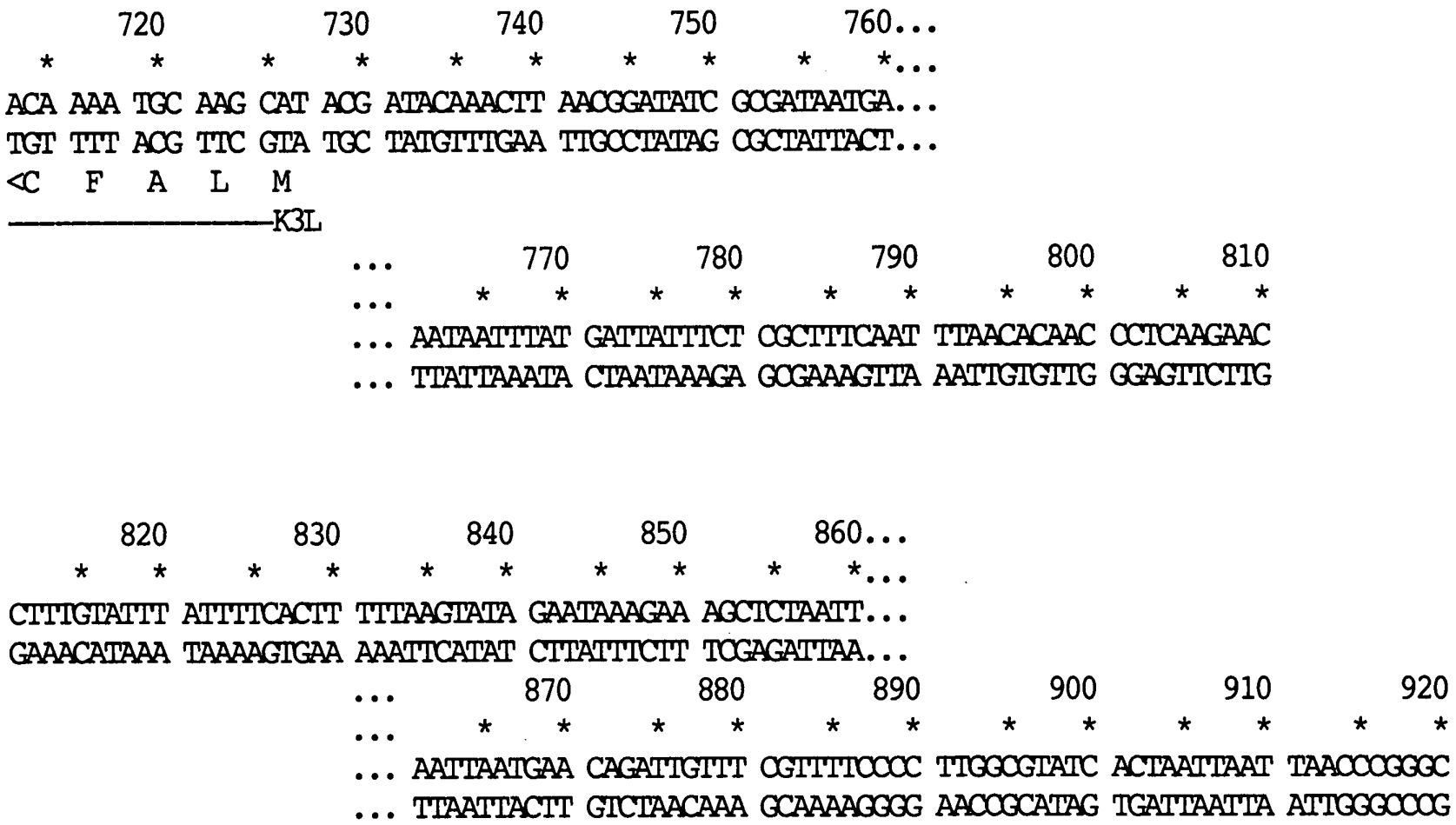
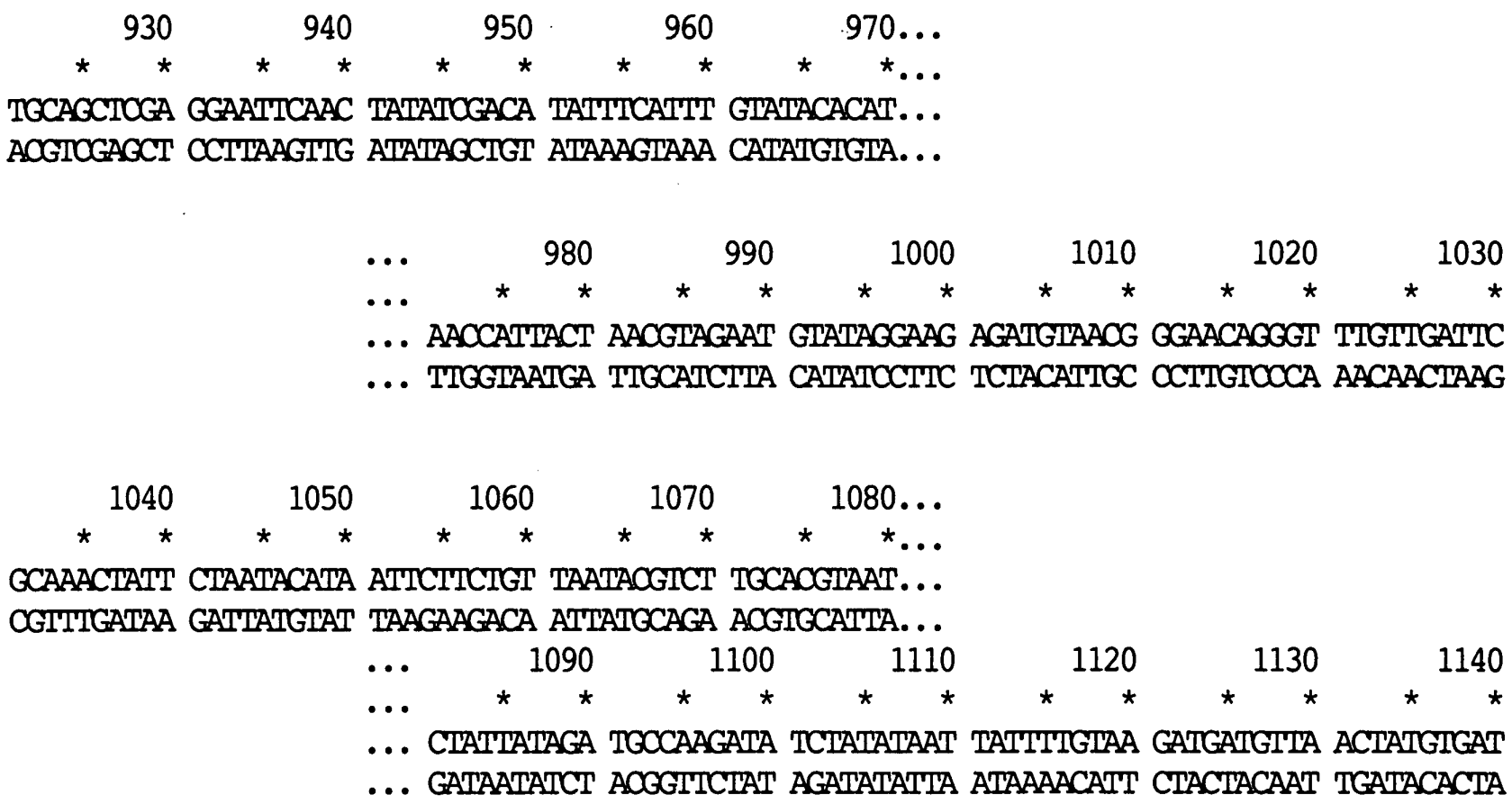


FIG.12F



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O.G. FIG.
CLASS SUBCLASS
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O.G. FIG.
CLASS SUBCLASS

FIG.12G

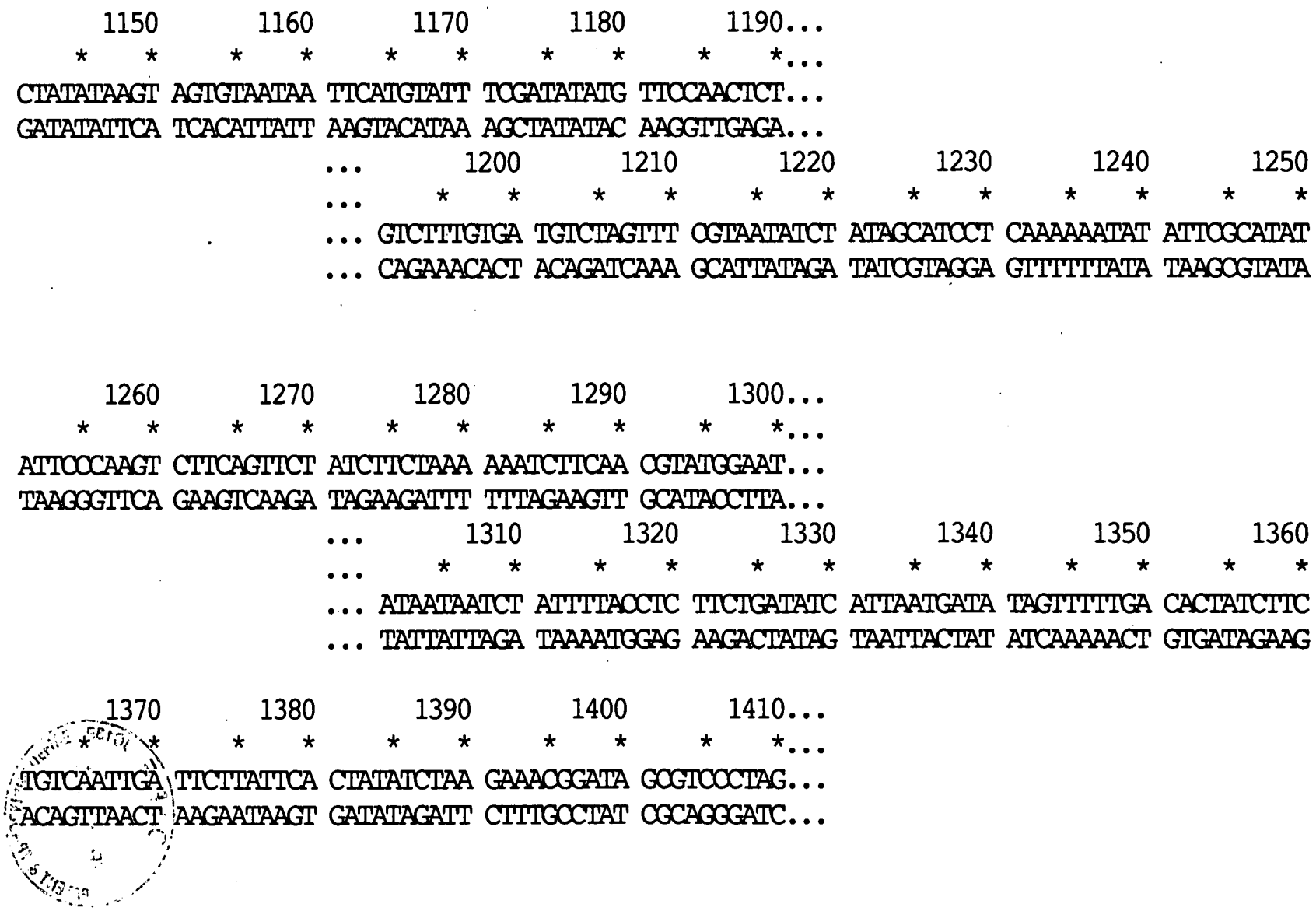
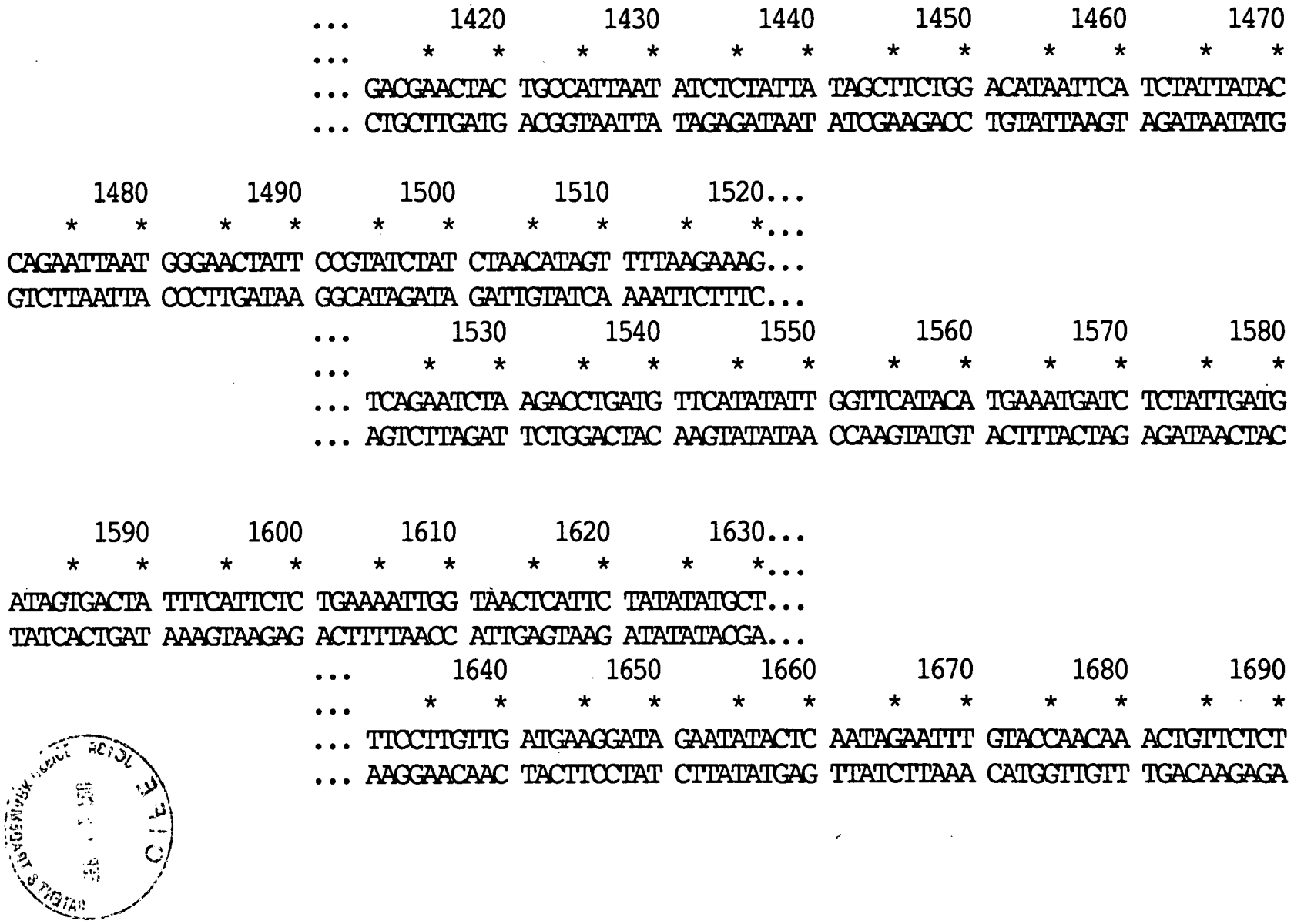


FIG.12H



APPROVED BY
O.G. FIG.
CLASS SUBCLASS
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O.G. FIG.
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CLASS
SUBCLASS
DRAFTSMAN

FIG.12I

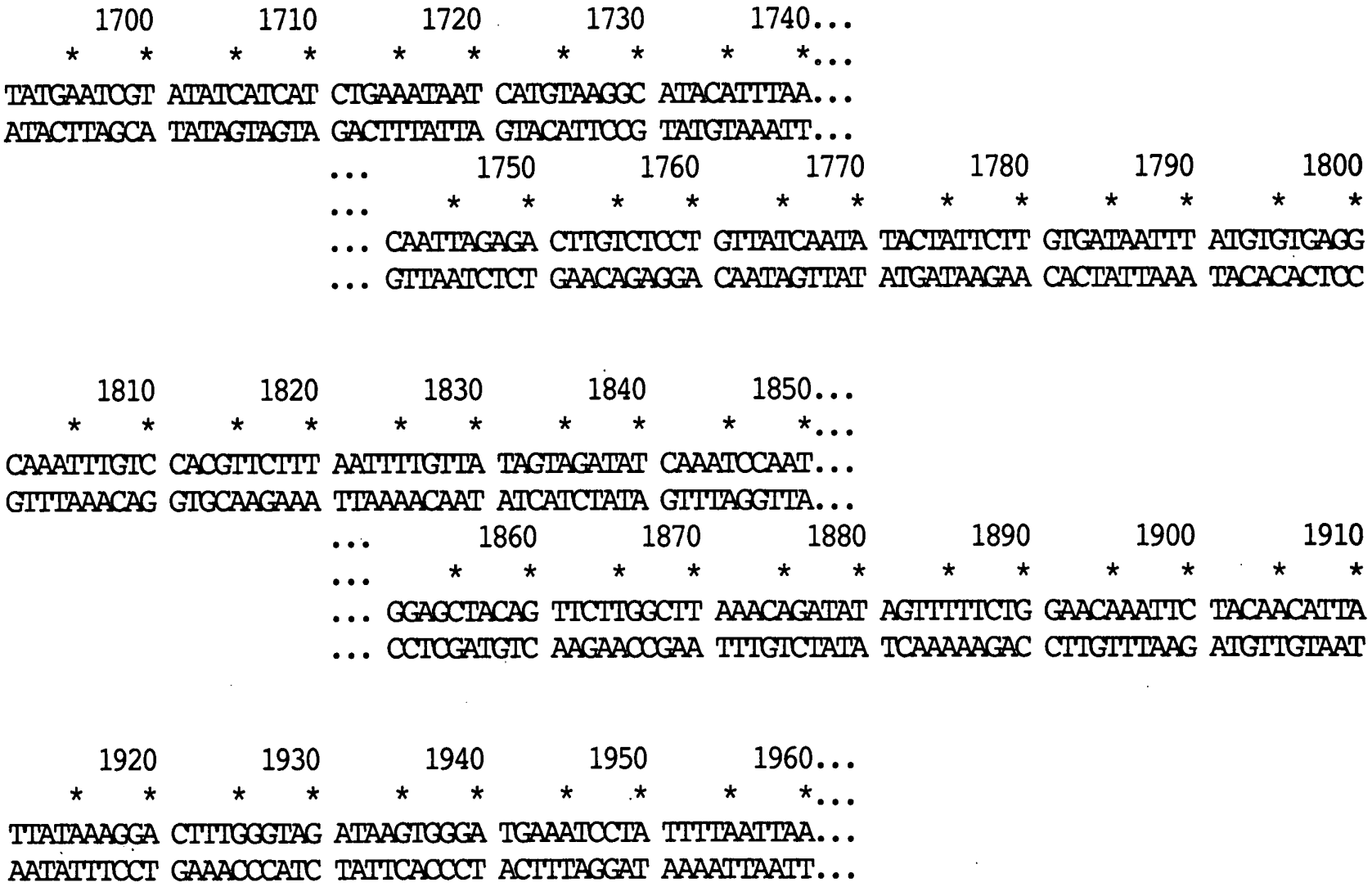
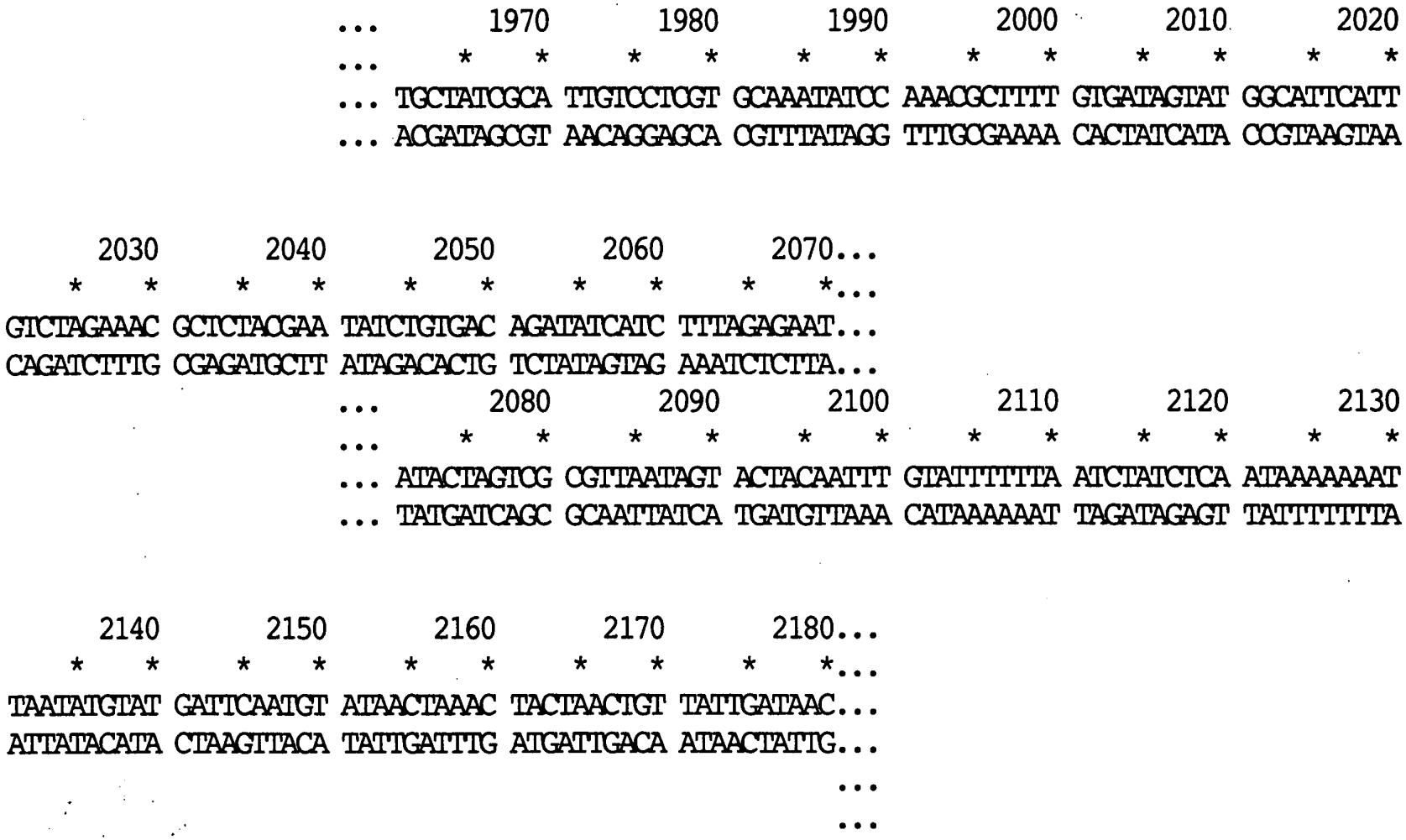


FIG.12J


1970 1980 1990 2000 2010 2020
TGCTATCGCA TTGTCCTCGT GCAAATATCC AAACGCTTTT GTGATAGTAT GGCATTCATT
ACGATAGCGT AACAGGAGCA CGTTTATAGG TTTGCGAAAA CACTATCATA CCGTAAGTAA
2030 2040 2050 2060 2070
GTCTAGAAAC GCTCTACGAA TATCTGTGAC AGATATCATC TTTAGAGAAT
CAGATCTTTG CGAGATGCTT ATAGACACTG TCTATAGTAG AAATCTCTTA
2080 2090 2100 2110 2120 2130
ATACTAGTCG CGTTAATAGT ACTACAATTT GTATTTTTTA ATCTATCTCA ATAAAAAAAT
TATGATCAGC GCAATTATCA TGATGTTAAA CATAAAAAAT TAGATAGAGT TATTTTTTTA
2140 2150 2160 2170 2180
TAATATGTAT GATTCAATGT ATAACTAAAC TACTAACTGT TATTGATAAC
ATTATACATA CTAAGTTACA TATTGATTTG ATGATTGACA ATAACTATTG

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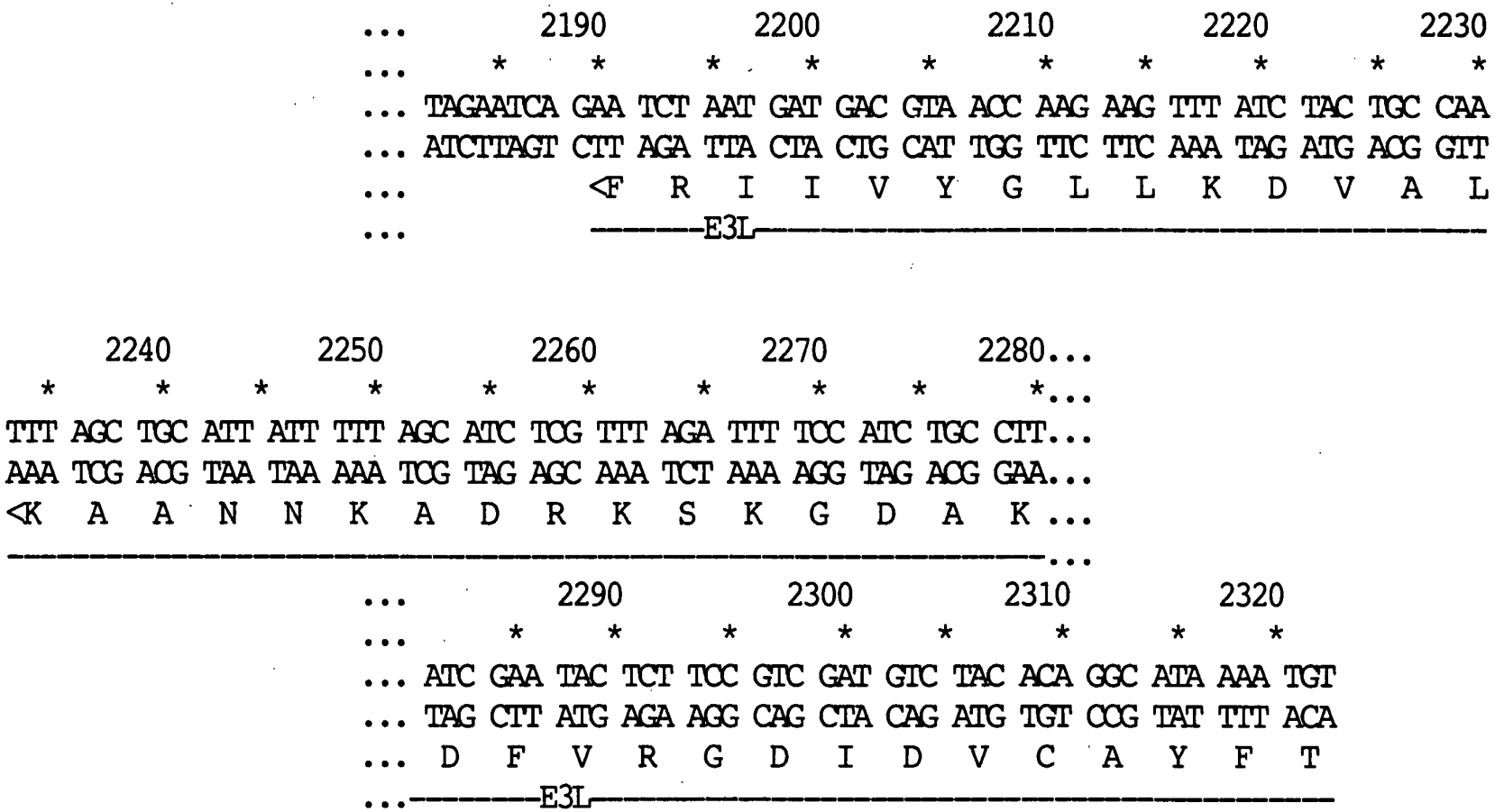
O.G. FIG.
CLASS SUBCLASS

FIG.12K



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O.G. FIG. CLASS SUBCLASS

FIG.12L

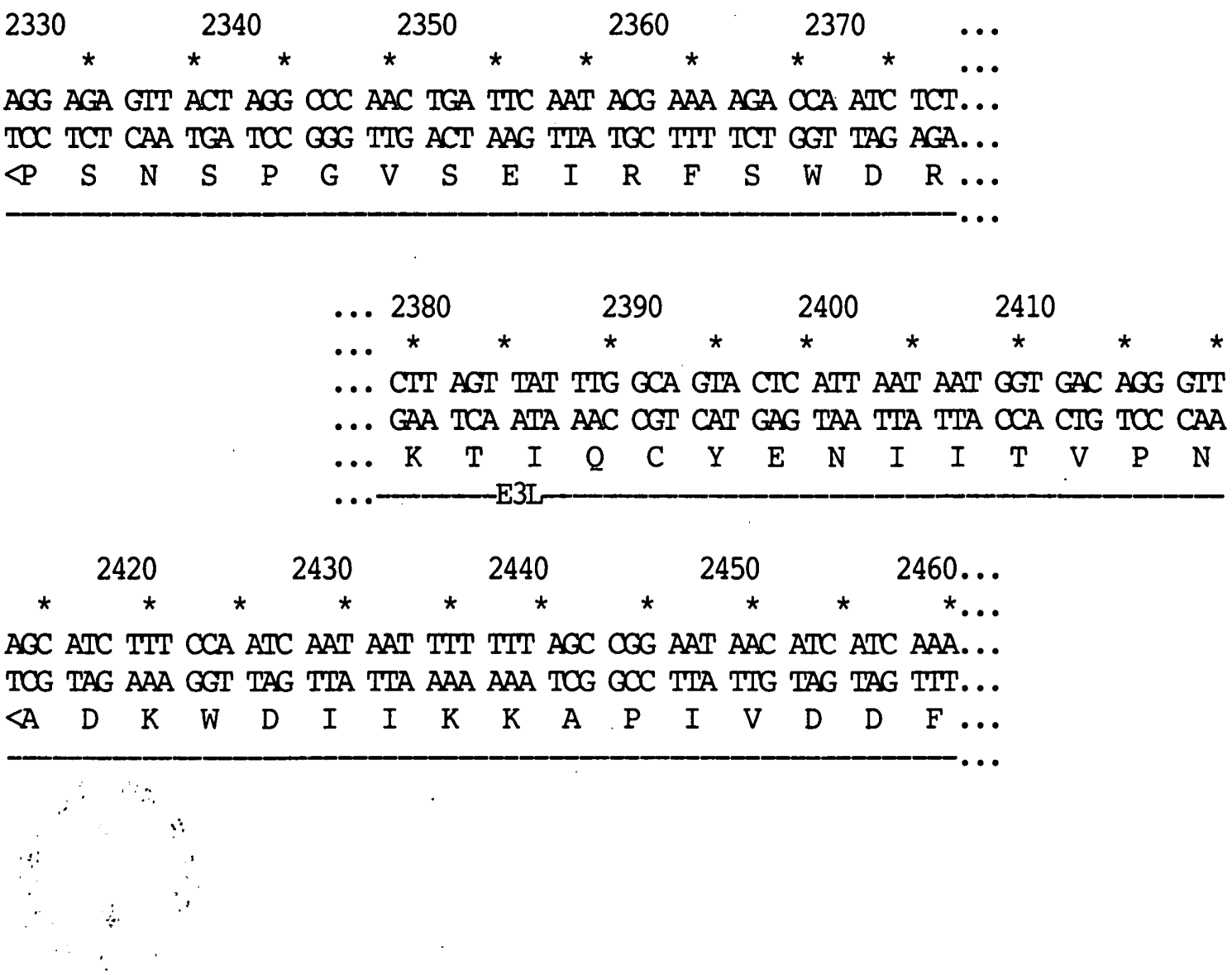
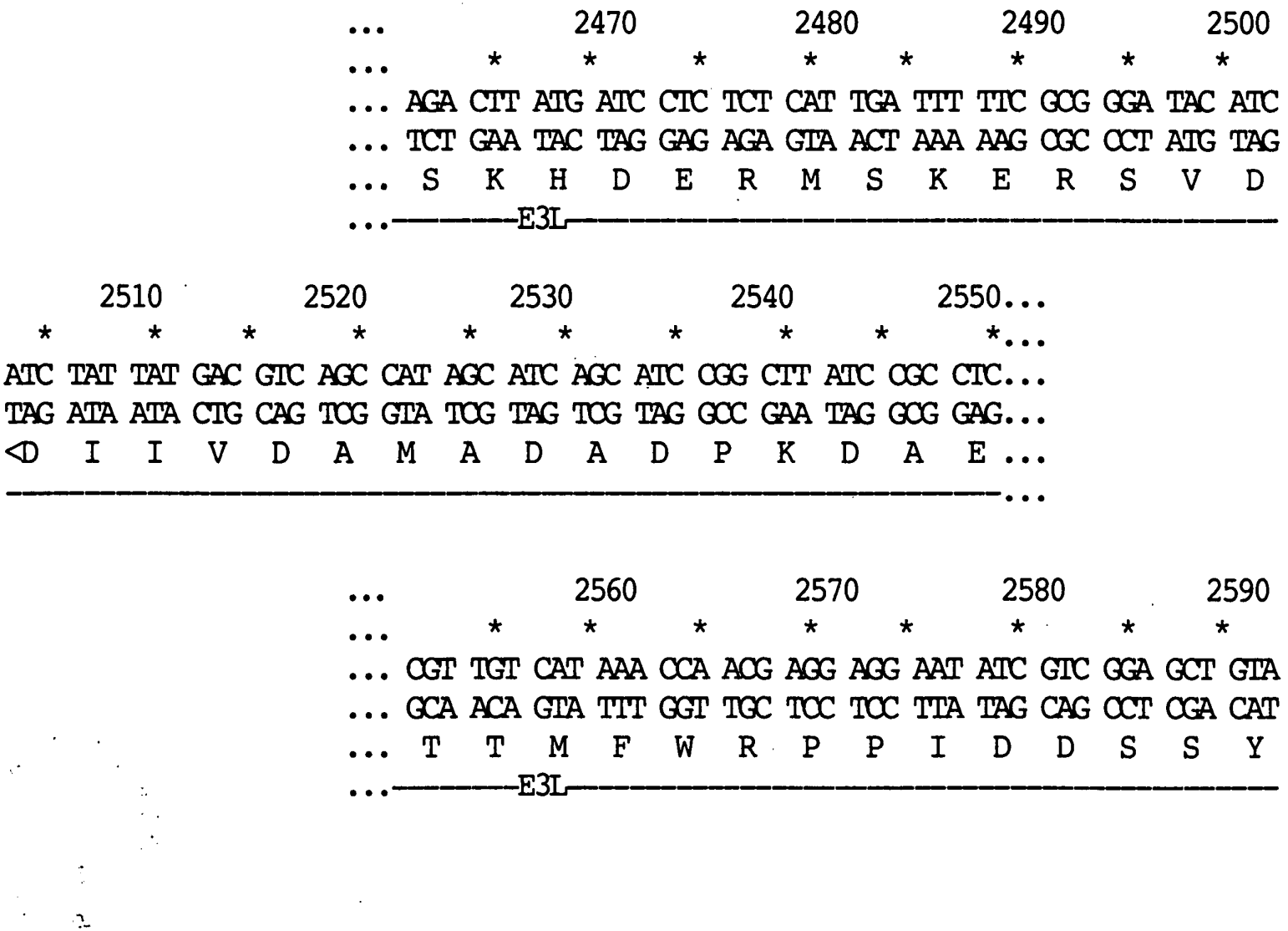


FIG.12M


2470
2480
2490
2500
AGA CTT ATG ATC CTC TCT CAT TGA TTT TTC GCG GGA TAC ATC
TCT GAA TAC TAG GAG AGA GTA ACT AAA AAG CGC CCT ATG TAG
S K H D E R M S K E R S V D
E3L
2510
2520
2530
2540
2550
ATC TAT TAT GAC GTC AGC CAT AGC ATC AGC ATC CGG CTT ATC CGC CTC
TAG ATA ATA CTG CAG TCG GTA TCG TAG TCG TAG GCC GAA TAG GCG GAG
<D I I V D A M A D A D P K D A E
2560
2570
2580
2590
CGT TGT CAT AAA CCA ACG AGG AGG AAT ATC GTC GGA GCT GTA
GCA ACA GTA TTT GGT TGC TCC TCC TTA TAG CAG CCT CGA CAT
T T M F W R P P I D D S S Y
E3L

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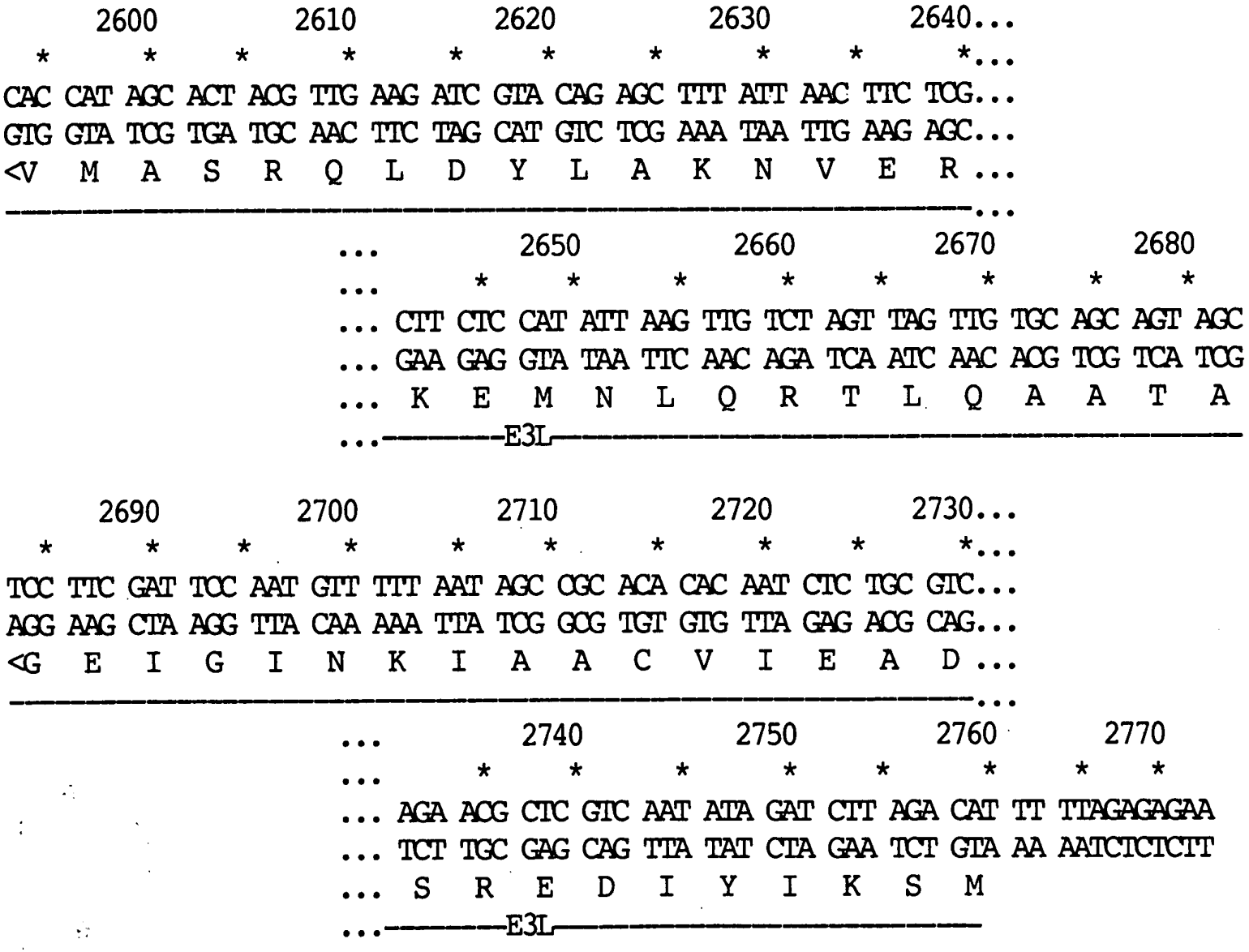
CLASS
SUBCLASS

FIG.12N



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O.G. FIG.
CLASS SUBCLASS
DRAFTSMAN

FIG.12O

```
      2780       2790       2800       2810       2820...
    *    *     *    *     *    *     *    *     *    *...
CTAACACAAC CAGCAATAAA ACTGAACCTA CTTTATCATT TTTTTATTCA...
GATTGTGTTG GTCGTTATTT TGACTTGGAT GAAATAGTAA AAAAATAAGT...
                      ...       2830       2840       2850       2860       2870       2880
                      ...     *    *     *    *     *    *     *    *     *    *     *    *
                      ... TCATCCTCTG GTGGTTCGTC GTTTCTATCG AATGTAGCTC TGATTAACCC GTCATCTATA
                      ... AGTAGGAGAC CACCAAGCAG CAAAGATAGC TTACATCGAG ACTAATTGGG CAGTAGATAT

      2890       2900       2910       2920       2930...
    *    *     *    *     *    *     *    *     *    *...
GGTGATGCTG GTTCTGGAGA TTCTGGAGGA GATGGATTAT TATCTGGAAG...
CCACTACGAC CAAGACCTCT AAGACCTCCT CTACCTAATA ATAGACCTTC...
                      ...       2940       2950       2960       2970       2980       2990
                      ...     *    *     *    *     *    *     *    *     *    *     *    *
                      ... AATCTCTGTT ATTTCCTTGT TTTCATGTAT CGATTGCGTT GTAACATTAA GATTGCGAAA
                      ... TTAGAGACAA TAAAGGAACA AAAGTACATA GCTAACGCAA CATTGTAATT CTAACGCTTT
```

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O.G. FIG.
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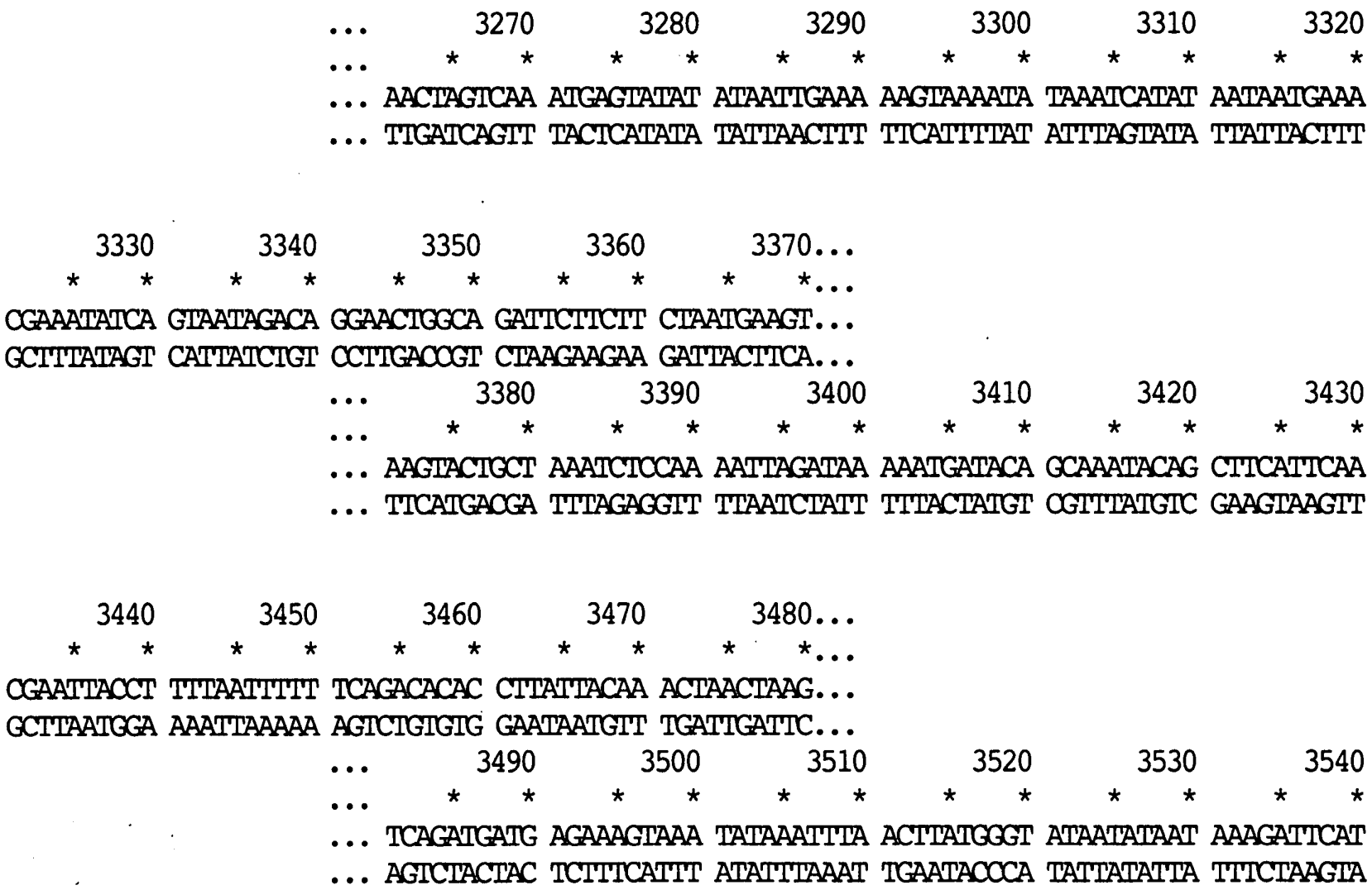
FIG.12P

```
      3000       3010       3020       3030       3040...
    *    *     *    *     *    *     *    *     *    *...
TGCTCTAAAT TTGGGAGGCT TAAAGTGTTG TTTGCAATCT CTACACGCGT...
ACGAGATTTA AACCCTCCGA ATTTCACAAC AAACGTTAGA GATGTGCGCA...
                      ...       3050       3060       3070       3080       3090       3100
                      ...     *    *     *    *     *    *     *    *     *    *     *    *
                      ... GTCTAACTAG TGGAGGTTCG TCAGCTGCTC TAGTTTGAAT CATCATCGGC GTAGTATTCC
                      ... CAGATTGATC ACCTCCAAGC AGTCGACGAG ATCAAACTTA GTAGTAGCCG CATCATAAGG

      3110       3120       3130       3140       3150...
    *    *     *    *     *    *     *    *     *    *...
TACTTTTACA GTTAGGACAC GGTGTATTGT ATTTCTCGTC GAGAACGTTA...
ATGAAAATGT CAATCCTGTG CCACATAACA TAAAGAGCAG CTCTTGCAAT...
                      ...       3160       3170       3180       3190       3200       3210
                      ...     *    *     *    *     *    *     *    *     *    *     *    *
                      ... AAATAATCGT TGTAACTCAC ATCCTTTATT TTATCTATAT TGTATTCTAC TCCTTTCTTA
                      ... TTTATTAGCA ACATTGAGTG TAGGAAATAA AATAGATATA ACATAAGATG AGGAAAGAAT

      3220       3230       3240       3250       3260...
    *    *     *    *     *    *     *    *     *    *...
ATGCATTTTA TACCGAATAA GAGATAGCGA AGGAATTCTT TTTATTGATT...
TACGTAAAAT ATGGCTTATT CTCTATCGCT TCCTTAAGAA AAATAACTAA...
```

FIG.12Q



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O. G. FIG.
CLASS SUBCLASS

FIG.12R

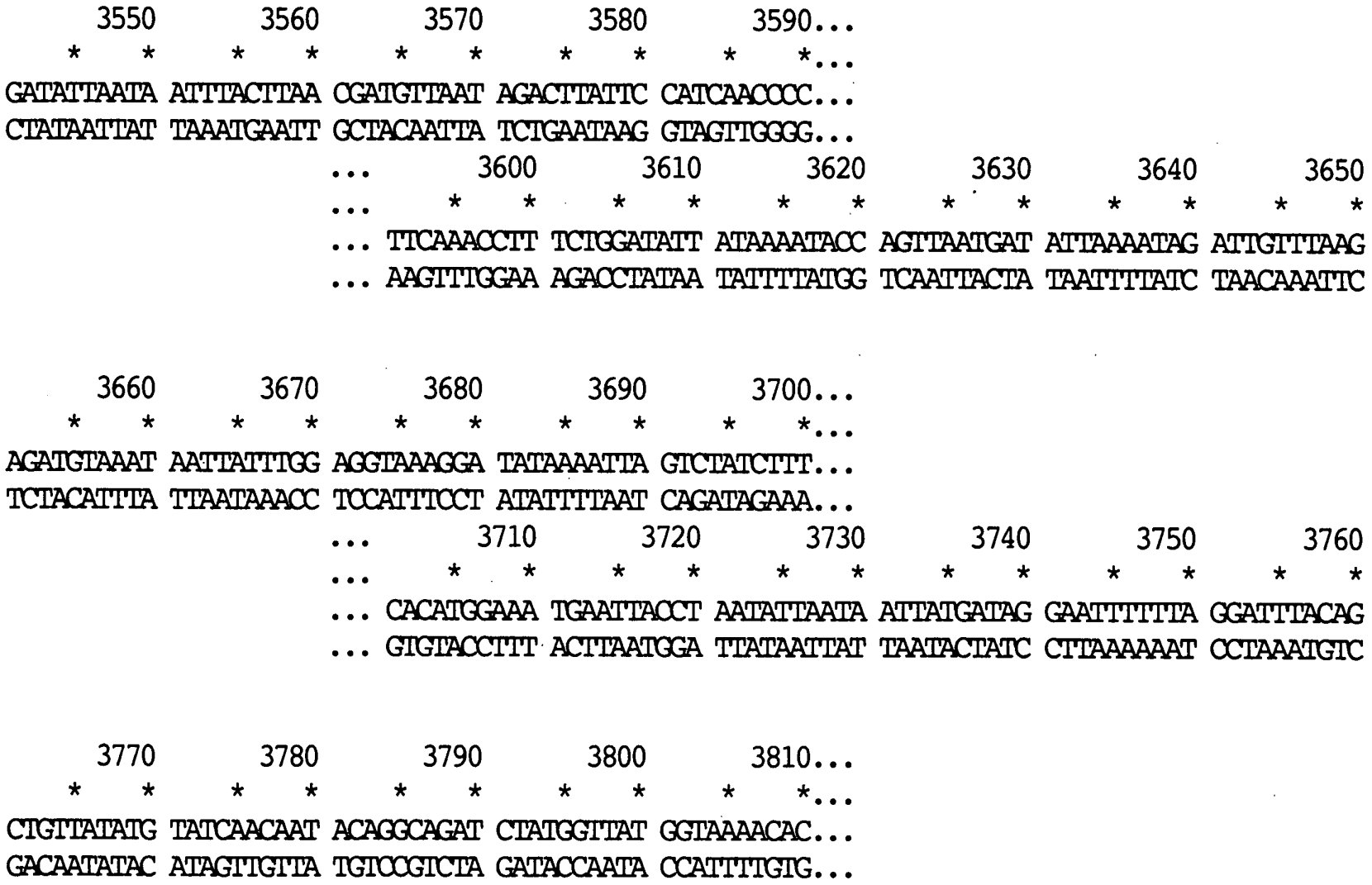
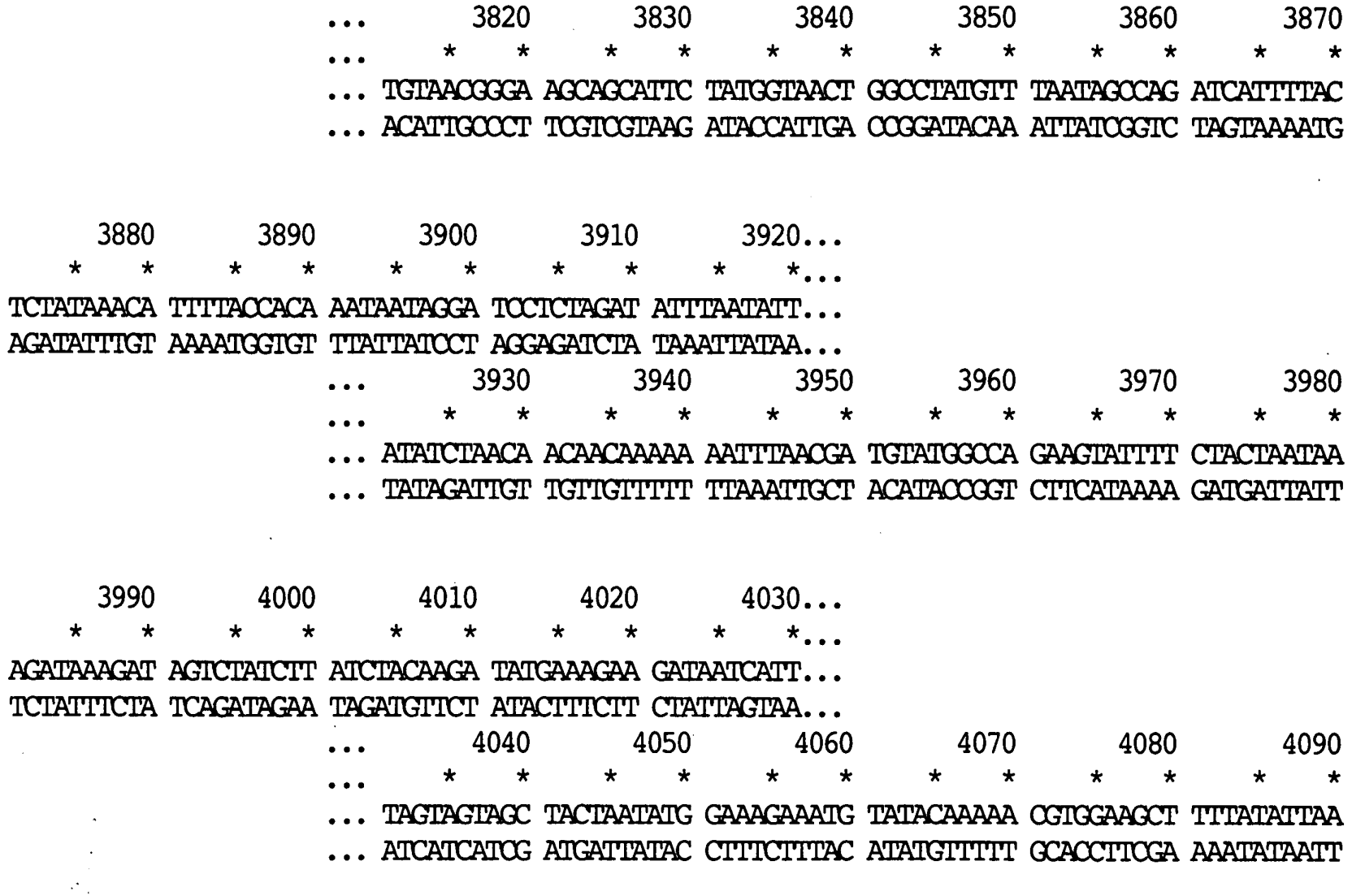


FIG.12S



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BY
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O. G. FIG.
CLASS SUBCLASS

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O.G. FIG.
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SUBCLASS

FIG.12T

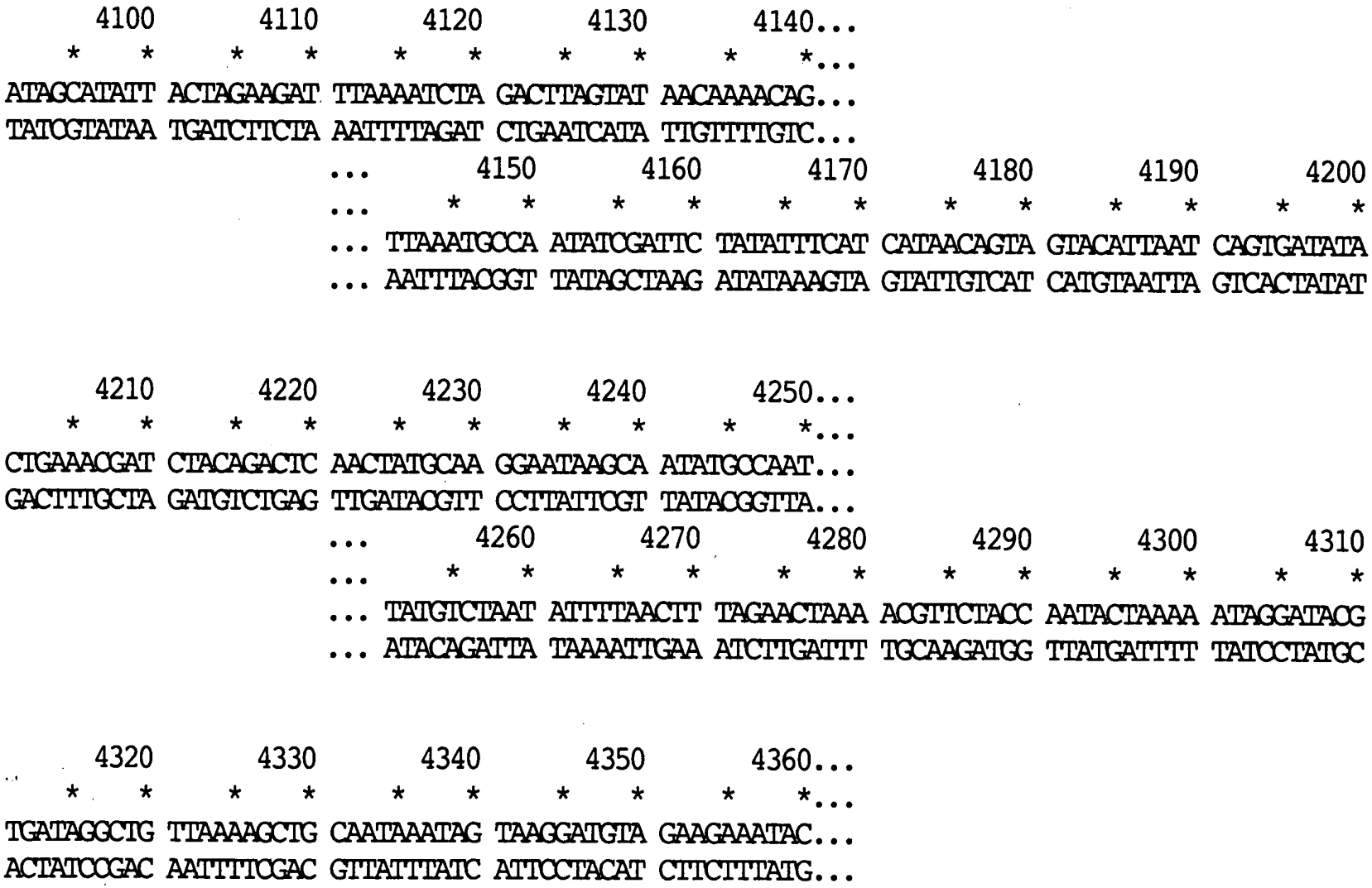
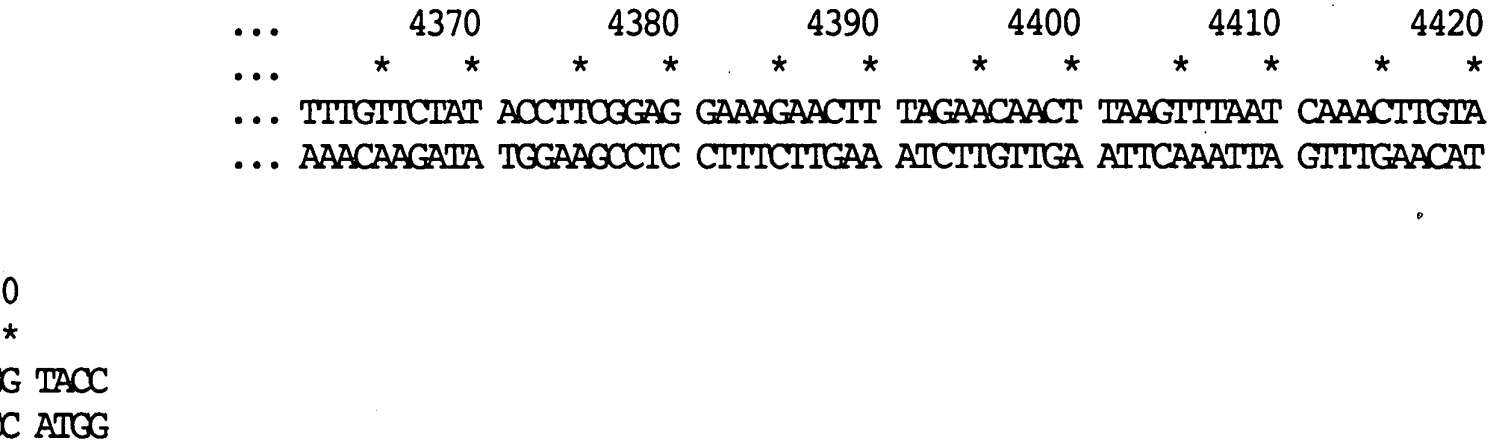


FIG.12U



APPROVED
BY
O. G. FIG.
CLASS SUBCLASS
DRAFTSMAN